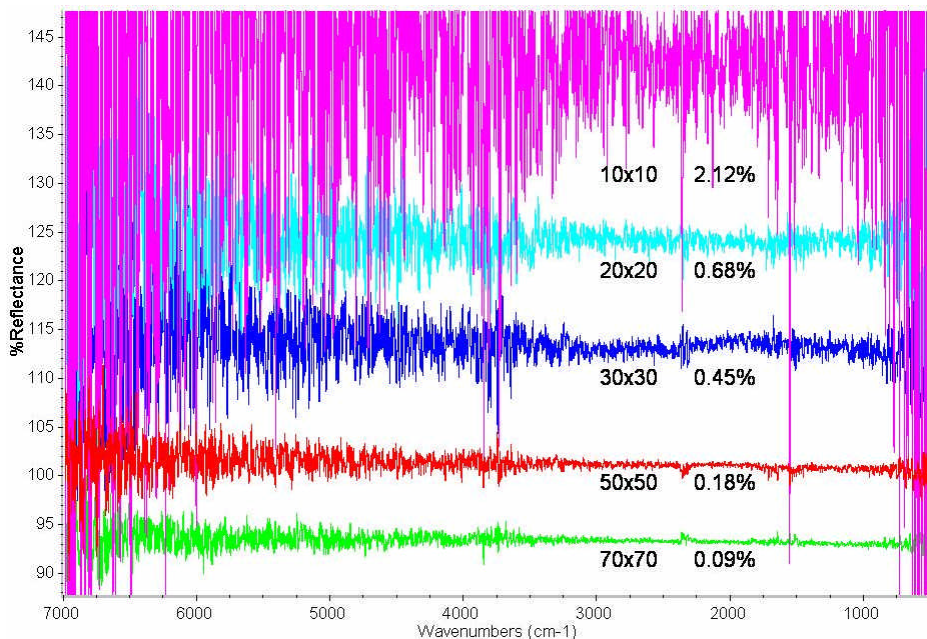




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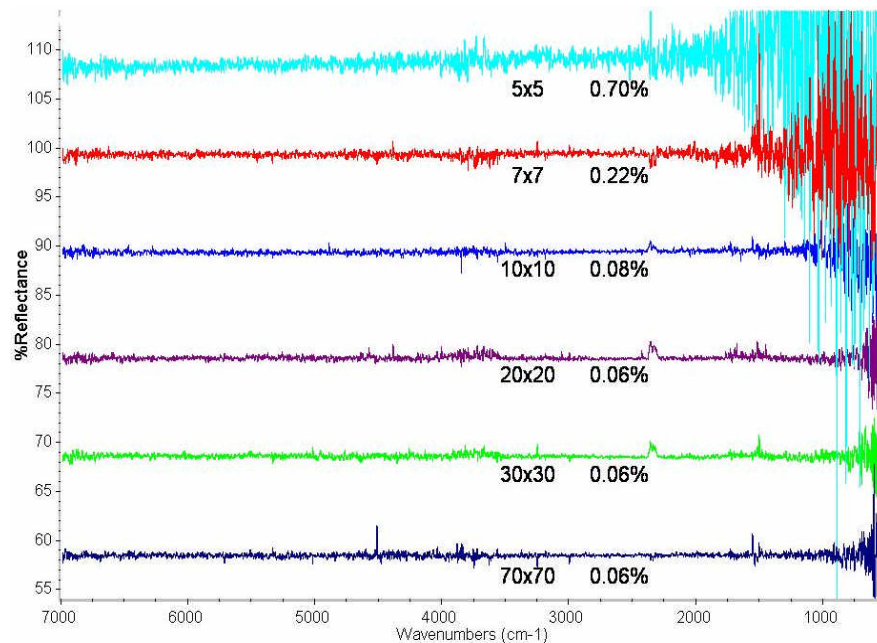
Why Synchrotron IR Source? High Brightness.

Thermal IR source



100% reflectance lines showing the noise level of the EverGlo™ thermal IR source when using smaller and smaller apertures. Noted for each curve are the aperture dimensions and the RMS noise determined between 2450 and 2550 cm^{-1} .

Synchrotron IR source

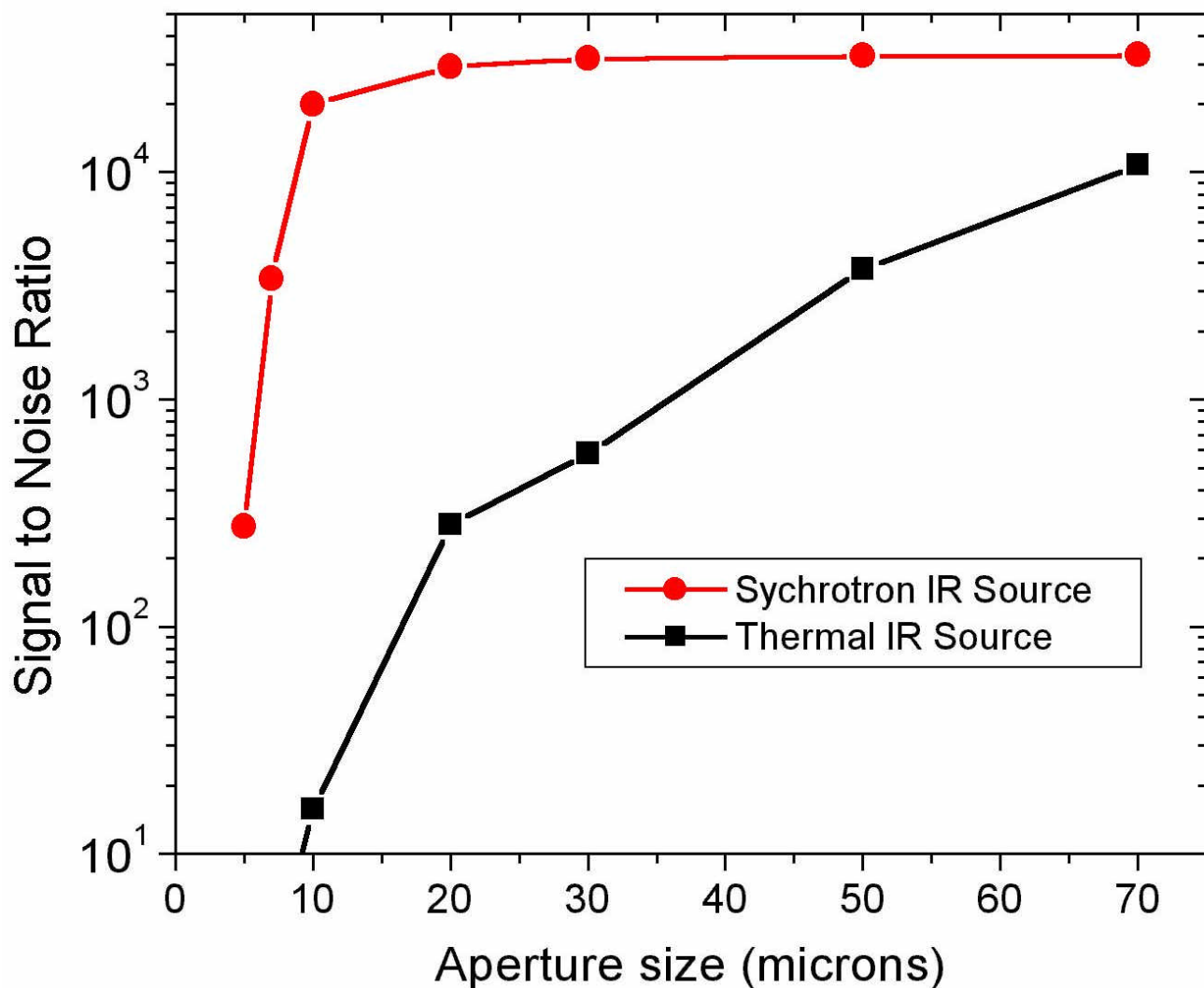


100% reflectance lines for the ALS synchrotron IR source when using smaller and smaller apertures. Noted are the aperture dimensions and the RMS noise determined between 2450 and 2550 cm^{-1} . The diffraction-limited synchrotron spot size is not clipped until the aperture is below 10 microns, and only for the longer wavelengths.



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High Brightness of Synchrotron Source



1000 times brighter

Better Signal-to-Noise

Higher Spatial Resolution

Faster Data Collection